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100 GROVE ST | WORCESTER, MA 01605

March 16, 2015

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Joseph Laydon
Town Planner
Grafton Municipal Center
30 Providence Road
Grafton, MA 01519

**PLANNING BOARD
GRAFTON, MA**

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gravesengineering.com

**Subject: Self-Storage Facility & Solar Electric Generation – 100 Milford Road
Special Permit and Site Plan Review**

Dear Joe:

We received the following documents on February 25, 2015:

- Correspondence from Andrews Survey & Engineering, Inc. to Mr. Joseph Laydon, Town Planner dated February 13, 2015 regarding "Comment Letter Responses, Proposed Self-Storage & Solar PV Facility, 100 Milford Road, Grafton," with attachments.
- Full-size and reduced-size plans entitled Proposed Self-Storage Facility, 100 Milford Road, South Grafton, Massachusetts dated February 4, 2015, prepared by Andrews Survey & Engineering Inc. for Hilltop Self-Storage of Grafton, LLC. (10 sheets)
- Bound document entitled Application for Special Permit & Site Plan Review, Self-Storage Facility & Solar Electric Generation, 100 Milford Road, South Grafton, MA dated February 4, 2015, prepared by Andrews Survey & Engineering, Inc. for Hilltop Self-Storage of Grafton, LLC.
- Bound document entitled Stormwater Management Report, Self-Storage Facility, 100 Milford Road, South Grafton, MA dated February 4, 2015, prepared by Andrews Survey & Engineering, Inc. for Hilltop Self-Storage of Grafton, LLC.
- Bound document entitled Operation and Maintenance Plan, Self-Storage Facility, 100 Milford Road, South Grafton, MA dated February 4, 2015, prepared by Andrews Survey & Engineering, Inc. for Hilltop Self-Storage of Grafton, LLC.

Graves Engineering, Inc. (GEI) has been requested to review and comment on the plans' conformance with applicable "Grafton Zoning By-Law" amended through October 14, 2013; Massachusetts Department of Environmental Protection (MADEP) Stormwater Management Policy and standard engineering practices on behalf of the Planning Board. GEI has also been requested to review and comment on the documents' conformance with applicable Conservation Commission "Regulations Governing Stormwater Management" dated May 2013 and "1988 Rules and Regulations for the Administration of the Town of Grafton Local Wetlands By-Law" amended July 2005 on behalf of the Conservation Commission. As part of this review GEI performed a reconnaissance site visit on March 11, 2015.

Our comments follow:

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Zoning By-Law

1. GEI has no issues relative to compliance with Grafton Zoning By-Laws.
2. GEI did not review the proposed sign for compliance with Grafton Zoning By-Laws. We understand that the Planning Board and its staff will address review of any signs.

Grafton's Regulations Governing Stormwater Management

3. The hydrology computations submitted were not based upon "Cornell Data" precipitation amounts. The website <http://precip.eas.cornell.edu> can be used to obtain rainfall data for the Grafton area. The rainfall data must be for a 24-hour storm event. (§6.B.3.b)

Regulations for the Administration of the Wetlands By-Law

4. Eighty percent total suspended solids (TSS) removal will not be achieved before stormwater enters the infiltration basin. Forty-four percent TSS removal will be achieved via the combination of catch basins and the forebay. (§V.B.5.h.10)

Hydrology & MADEP Stormwater Management

5. GEI reviewed the hydrology computations and found them to be in order for the purpose of site plan review. The precipitation amounts utilized in the hydrology computations were based upon those published in Technical Paper 40 (TP-40), which is standard practice unless specific regulations (e.g. Grafton's Regulations Governing Stormwater Management) require greater precipitation amounts.
6. The dimensions of the rip rap aprons within the infiltration basin (as shown on Sheet C-5.0) are smaller than the required dimensions calculated in the Stormwater Management Report. The rip rap aprons must be revised on the plans.

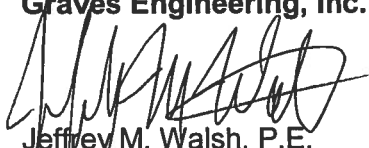
General Engineering

7. The Precast Concrete Double Single Grate (CB) Catch Basin & Double Grate (DCB) Deep Sump Catch Basin detail specifies a 24"x36" opening for double grate catch basins. The opening should be 24"x48".
8. The eighteen-foot wide access aisle for the parking spaces north of the office building is narrower than typical access aisles for perpendicular parking. Although the 18-foot access aisle could work, vehicles entering and leaving the parking spaces will have to execute part of their turning maneuvers within the parking spaces. Although the parking space widths do meet the requirements of the Zoning By-Law, the design engineer should consider making the parking spaces wider for better maneuverability.
9. Information regarding the Building B roof drain pipe (i.e. invert elevations, pipe diameter and material) must be included on the plans.
10. Rip rap must be placed at the outlet of the Building B roof drain pipe.
11. The drain manhole construction detail on Sheet C-7.2 needs to include an invert channel.

12. The handicapped parking space was drawn with a five-foot wide access aisle but the "Handicap Parking Space" construction detail on Sheet C-7.2 shows a nine-foot wide access aisle. The information needs to be consistent.

We trust this letter addresses your review requirements. Feel free to contact this office if you have any questions or comments.

Very truly yours,
Graves Engineering, Inc.



Jeffrey M. Walsh, P.E.
Vice President

cc: Grafton Conservation Commission
Stephen O'Connell; Andrews Survey & Engineering, Inc.